Session II

Bruce Mehlman – DoC

- US has best Technology Transfer system in world. Other countries are copying. Have plenty of room for improvement
- Innovation is key driver of future prosperity
- Complexity in R&D/Appl will introduce new challenges to Tech Transfer
- Is there a roll for Tech Transfer? Yes: use tools as appropriate
- Realistic Expectations: have some misconception on both side
- What works well:
- What needs improvement: Tech Transfer FTE's need to have better incentives, higher level access, better resources. University support TT professional at much higher level than in government. Need better means to get info to small/med businesses. Need more of culture of taking TT risks.
- Inherent conflicts: cultural w/industry; mission; public vs. private
- Will TT get harder? US competing for best and brightest; government missions consistency; future complexity in tech partnerships; competition alternatives to government labs.
- PCAST report out soon. Does not address resources for funding Technology Transfer yet.

Dr. Pat looney – OSTP

- OSTP Mission:
- Government participation: prototype level development in gray area.
- Current frontiers in R&D: Science push, society pull, R&D environment.
- Challenges in R&D strategy: shifting R&D budget allocations, human resource issues, R&D organizational issues (stovepipe, etc.), including international competition.
- Some key charts on history of R&D funding and performers of national R&D system; and human capital show shifting national interests toward Bio-tech with nanotech emerging. Will need much more diverse workforce to meet technology demands in future.

Mr. Chris Roberts – PixSel

- Business view of R&D commerce
- TT from Government to Industry
    - Business risk categories (tech, market, financial, political, personnel)
    - Patience is a necessary virtue = Innovation process is very slow (cultural conservation, cost v. benefit,)
- Assessment of business failures: tech management teams (90% fail) vs. business management teams (80% success)
- 3 critical factors for Government to Business collaboration innovation

- Staffing
- Metrics/objectives
- Financing

- Key players on successful Entre'l Tech Venture:
  - Idea generator, creative thinker
  - Product champion
  - Program manager
  - Resource sponsor, financier, coach

- Program metrics: Government vs. Business (NIH & taxol license fee as example)
- Financing issues: VC's generally don't do financing
  - < ~$2M, investment typical, good management team is minimum requirement, design once build many is objective
- VC business status (aerospace not seem as profitable in area)
- Different approaches to collaborative R&D
- Recommendations for Government programs

Dr. Tom Stackhouse – NIH

- NCI does Tech Transfer for other 12 institutes in NIH
- NCI does only CRADA's, but would like to use "Other Transactions" from NASA.
- NCI has multiple collaboration model in CRADA
- AP4 (Academic Public Partnership Program)
  - New partnership type organization
  - Includes government acting in close 'company' type arrangement
  - Extensive interaction and collaboration between industry and government